STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

May 18, 2001

Pratt & Whitney
CTD991061081
R-9
RDMS # 100163

Lauren Levine, Senior Project Manager
United Technologies Corporation
United Technologies Building
1 Financial Plaza
Hartford, CT 06101

RDMS DocID 00100163

Re: Pratt & Whitney, Willow Brook and Willow Brook Pond; East Hartford, CT

Dear Ms. Levine:

The Permitting, Enforcement & Remediation Division of the Bureau of Water Management (the "Department"), with the assistance of the PCBs Management Program of the Bureau of Waste Management, has reviewed the following documents which were prepared by Loureiro Engineering Associates, Inc. on behalf of United Technologies Corporation, Pratt & Whitney Division:

- "Remedial Action Work Plan, United Technologies Corporation, Pratt & Whitney, Willow Brook and Willow Brook Pond, East Hartford, Connecticut", dated November 2000;

- "Request for Variance, Engineered Control of Polluted Soils, Pratt & Whitney, Willow Brook and Willow Brook Pond, East Hartford, CT", dated January 2001.

The above plans propose remedial actions to address sediment polluted with PCBs in Willow Brook and in two ponds and one wetlands area associated with the brook in East Hartford, Connecticut. The plans also propose to remediate soil pollution associated with a former oil water separator located between the upper and lower Willow Brook Ponds, and remediate soil pollution in certain other areas in the immediate vicinity of the brook, ponds, and wetlands. The plans propose to remove sediment to a standard of 1 mg/kg (ppm) PCBs in the wetlands area. In other areas, the plans propose to remove soil and sediment to a standard of 25 mg/kg, and request approval to use of an engineered control to physically isolate and prevent migration of polluted soil and sediment which contain concentrations exceeding 1 mg/kg.

The Department has also reviewed the letter dated April 27, 2001 from Mr. Brian Cutler of Loureiro Engineering Associates, Inc. which responds to the Department's April 10, 2001 comments on the above plans. The information provided in the April 27, 2001 letter supports the request to use an engineered control. Based on this review, the Department has made a preliminary determination that the engineered control approach is an acceptable alternative. However, the Department will not approve the plan until the public has had an opportunity to comment on your proposal.

The Department's detailed comments on the plans are listed below. These comments were discussed with you and with Brian Cutler and Jeff Loureiro of Loureiro Engineering Associates at our April 23, 2001 meeting. Revised plans or addenda which address these comments must be submitted for review and approval within 60 days of receipt of this letter.

Comments on "Remedial Action Work Plan":

1. Section 1.4.1, Nature and Extent of Contamination, Soil and Sediment, and Section 2.0, Statement of Work: Additional investigations will be required to determine the extent and sources of soil polluted with PCBs and other constituents in the vicinity of the Willow Brook culvert upstream of the Upper Willow Brook pond, and the banks of the ponds, wetlands, and stream channel. Additional remedial actions may be required. It is acceptable to perform these additional investigation and remedial actions at a later date or under the RCRA corrective action program overseen by the U.S. EPA, Region.

2. Section 1.4.2, Nature and Extent of Contamination, Groundwater Sampling: Available monitoring data for wells WT-MW-08, MW-09S, and MW-09I, and any additional monitoring wells which are not shown on the figures must be submitted.

3. Section 2.0, Statement of Work: It should be verified that PCB contaminated sediments are not present in the culvert or in piping which discharges to the culvert, and that PCB contaminated materials are no longer discharging into the Willow Brook drainage system.

4. Section 2.0: It should be clarified whether all wetlands sediments will be removed from the wetlands area down to the underlying alluvium, or whether wetlands sediments will only be excavated to a standard of 1 mg/kg PCBs.

5. Section 2.0: Sediment in the vicinity of WT-SD-47 in the upper pond has high concentrations of SVOCs, (for example 183 mg/kg benzo(a)pyrene. It is our understanding that sediment at this location will be removed prior to construction of the cap.

6. Figure 2-1 appears to show that sediments in the eastern portion of the wetlands will not be excavated. However, the available data indicates that all sediments within the wetlands contain concentrations of PCBs exceeding 1 ppm and require excavation in accordance with the plan.

7. Section 2.3.2, Former Oil-Water Separator: Additional detail is required regarding the standard to which "impacted soil surrounding the structure" will be removed and disposed of prior to construction of the engineered control. The plan must propose to remove any floating product prior to construction of the engineered control, including the oil product found at boring WT-SB-88.

8. Section 2.3.2: It is the Department's understanding that the location of piezometer WT-PZ-140 was mislabeled on the figures and that the soil contamination at WT-PZ-140 will be addressed as part of the oil-water separator remedial actions. Corrected figures are required.

9. Section 2.3.3, Contaminated Soil and Sediment Excavation and Off-site Disposal: There must be a plan describing construction and monitoring methods to ensure that there will be no potential exposure to unacceptable levels of airborne contaminants during the work. These must include,

but are not limited to, methods to reduce dust creation, procedures to notify nearby workers and residents of the work, the applicable air quality criteria, air quality monitoring procedures, and notification procedures if air quality standards are exceeded.

10. Section 2.3.3, Stream Flow During Construction, pg. 15: There have been changes to the proposed procedures and it is proposed in the February 14, 2001 applications for the Clean Water Act Section 401 and 404 permits to construct a bypass channel to divert flow around the entire work area and eliminate temporary dams. The proposed procedure must be updated in this plan, and additional details must be provided or referenced. The plan should verify that the base and sidewalls of the channel will include an impermeable liner.

11. Section 2.4.1, Post-Remediation Reports: Additional detail is required regarding the content of the post-remediation report. In general, most of the documentation items listed in section 2.3.6, Record-keeping and Reporting, and in Section 4.4.3, Documentation, must be included. Copies of the analytical reports as received from the laboratory should be submitted; however, it is acceptable and recommended that these reports be submitted on a computer disk in Adobe Acrobat or a similar read-only format.

12. Section 3.0, Project Schedule: A schedule must be provided for submittal of the proposed environmental land use restriction for review and approval.

13. Section 4.2.3 and Section 5.1.5, Disposal Characterization Sampling: Sampling of stockpiled soil for PCBs disposal characterization is not permitted under federal regulations 40 CFR 761. However, additional sampling of stockpiles for other constituents, such as metals and SVOCs may be performed for disposal characterization.

14. Section 5.7.1, Field Analytical Procedures: The referenced table 5.5 does not indicate the precision and/or accuracy of the field test kits which will be used for PCBs analysis.

Comments on "Request for Variance, Engineered Control of Polluted Soils", specifically Sections 4.2 and 4.3 regarding Groundwater Monitoring, and Maintenance of the Engineered Control:

The Department has drafted a proposed consent order for the project, which will require submittal of a more detailed groundwater monitoring and maintenance plan. In that submittal, you should address the following comments:

15. The plan must propose to continue monitoring and maintenance for as long as the engineering control is in place.

16. As discussed at our meeting of April 23, 2001, additional monitoring wells are required immediately downgradient to the north and south sides of the former oil/water separator, and on the southeast bank of the upper pond, the southeast bank of the lower pond, and the south bank of

the stream channel. It should be acceptable to relocate two or three of the existing proposed wells to these locations.

17. It is our understanding that the plan will include monitoring of groundwater in the granular fill layer of the cap, just above the organic soil layer. The plan should provide for sediment and surface water monitoring if the groundwater samples from the granular fill layer indicate PCB contamination.

18. Inspection and maintenance procedures for the engineered control at the former oil-water separator must be proposed.

19. Additional inspections should be performed after unusually heavy storm events.

20. The plan should note the repairs which will be made based on the results of the inspections.

If you have any questions regarding these comments, please contact me at (860) 424-3780.

Sincerely,

Richard C. Hathaway, Jr.

Richard C. Hathaway, Jr.
Environmental Analyst 3
Permitting, Enforcement & Remediation Division
Bureau of Water Management

cc: Jeffrey J. Loureiro, P.E., L.E.P., Loureiro Engineering Associates, Inc.
Juan Perez, U.S. EPA Region 1
Lori Saliby, CT DEP, PCBs Management Program
Melissa Toni, CT DEP, Inland Water Resources Division

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